

IKHALA TVET COLLEGE

Sterkspruit Business Campus Upgrade



BILL OF QUANTITIES

Date: October 2025

Submitted by: Greenfield Resources (Pty) Ltd

DOCUMENT CONTROL

<u>Revision</u>	02
<u>Title</u>	<u>Upgrades of Ikhala - Sterkspruit Business Campus: Bill of Quantities</u>
<u>Reference No</u>	<u>25006BOQ003WC</u>
<u>Date</u>	<u>24 October 2025</u>
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<u>Date</u>	

Revision History

<u>Rev.</u>	<u>Date</u>	<u>Nature of Changes</u>	<u>By</u>
00	30 September 2025	Original Issue	Walter Chipoyera
01	15 October 2025	Include Training, Mentorship, and changes to Electrical, Mechanical, Manhole & Earthwork changes	Walter Chipoyera
02	24 October 2025	Addition of Training and Professional Services provision	Walter Chipoyera

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Item No	Quantity	Rate	Amount
<u>SECTION 1</u> <u>BILL NO. 1</u> <u>PRELIMINARY & GENERALS</u> <u>BUILDING AGREEMENT AND PRELIMINARIES</u> The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described The Preliminaries for use with the JBCC Series 2000 Principal Building Agreement (May 2005 edition) prepared by the Joint Building Contracts Committee, shall be deemed to be incorporated in these bills of quantities Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above-mentioned documents Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable" Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence			
Carried Forward		R	
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL			

Brought Forward	R
<u>GENERAL</u>	
If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value	
<u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u>	
<u>Definitions (A1)</u>	
Definitions and interpretation (clause 1)	
Sub-clause 1.1 Add the definition of "contractor insolvency event" after "works completion":	
(i) The Contractor commits an act which, if committed by an individual, would constitute an act of insolvency within the meaning of Sections 8 or 9(3)(a)(v) of the Insolvency Act 24 of 1936, as amended, or any equivalent legislation in any jurisdiction to which it is subject;	
(ii) The Contractor begins negotiations or takes any other step with a view to generally deferring, re-scheduling or otherwise re-adjusting all or a material part of its indebtedness or proposes or makes a general scheme, arrangement, assignment, or composition with or for the benefit of its creditors or a moratorium is proposed or agreed in respect of or affecting all or a material part of its indebtedness;	
(iii) The Contractor makes an application to court for business rescue supervision or for its winding-up (whether provisionally or finally);	
(iv) A court of competent jurisdiction grants an order winding-up Contractor (whether provisionally or finally) or makes an order placing the Contractor under business rescue supervision;	
(v) An application or other legal process (including the filing of any document commencing judicial process) is issued seeking an order for the winding-up of the Contractor (whether provisionally or finally) or liquidation (whether provisionally or finally) the Contractor under business rescue supervision, except for so long as such	
Carried Forward	R
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Brought Forward application or other legal process is being contested in good faith and by appropriate means or except for the bona fide purpose of reconstruction, amalgamation, reorganisation, merger or consolidation; or (vi) A resolution is passed by: a) The shareholders of the Contractor for the winding-up of the Contractor, whether by way of a members' or creditors' voluntary winding-up; or b) The board of the Contractor for the Contractor to voluntarily begin business rescue proceedings and place himself under business rescue supervision. Sub-clause 1.5 The following new paragraphs are added after clause 1.5.6: 1.5.7 References to any party to this agreement include its successors or permitted assigns; 1.5.8 References to the contractor include the obligations of its personnel; 1.5.9 References to "month" shall be to a calendar month; 1.5.10 References to any amount shall mean that amount exclusive of VAT, unless the amount expressly includes VAT; 1.5.11 References containing terms such as "best endeavours" when used in connection with an obligation of either party, means taking in good faith and with due diligence all reasonable steps to achieve the objective and to fulfil the obligation at the earliest possible time, including doing all that a reasonable and prudent owner or provider of design and construction services in comparable circumstances would do. 1.5.12 If a definition imposes substantive rights and obligations on a party, such rights and obligations shall be given effect to and shall be enforceable, notwithstanding that they are contained in a definition; 1.5.13 Where any word is defined within the context of any particular clause in this agreement, that word, unless it is clear from the clause in question that that word has limited application only to the relevant clause, shall bear the meaning ascribed to it for all purposes in terms of this agreement, notwithstanding that that word has not been defined in clause 1.1;		R	
Carried Forward Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		R	

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	1.5.14 Words defined in this agreement shall bear the same meanings in any annexes or schedules to this agreement unless the annexes or schedules contain their own definitions of such words; 1.5.15 Where any number of days is prescribed, those days shall be reckoned exclusively of the first and inclusively of the last day unless the last day falls on a day that is not a working day, in which event the last day shall be the next succeeding working day; 1.5.16 Words and abbreviations that have well known technical or trade meanings are used in the agreement in accordance with such recognized meanings; 1.5.17 The rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given; 1.5.18 The rule of construction that the agreement shall be interpreted against or to the disadvantage of the party responsible for the drafting or preparation of this agreement shall not apply." Sub-clause 1.10 is added:The copyright in all contract documents, contract drawings and records (irrespective of who prepared any of the aforesaid) related in any manner to the works shall vest in the employer and the contractor shall not furnish any information in connection with the works to any person or organization without the prior written approval of the employer to this effect other than subcontractors appointed for purposes of this agreement." Sub-clause 1.11 is added:Any provision in this agreement that is or may become illegal, invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such prohibition or unenforceability in such jurisdiction and shall be treated as severed from the balance of this agreement in such jurisdiction, without invalidating the remaining provisions of this agreement in such jurisdiction or affecting it in any other jurisdiction		
1	F:..... V:..... T:.....	Item	
	Carried Forward		R
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Brought Forward		R
<u>Objective and Preparation (A2- A14)</u>		
2	Offer acceptance and performance (clause 2)	
	F:..... V:..... T:.....	Item
	Documents (clause 3)	
	Sub-clause 3.5 is amended by replacing it with: No Clause	
3	Sub-clause 3.7 is amended by replacing the second sentence starting in line 2 with the following:	
	The contractor shall keep a copy of all drawings, schedules, unpriced bills of quantities/lump sum document, contract instructions, minutes of site and other meetings, health and safety files as specified in the scope of work, risk register, claims and variation order register, labour records and subcontractors contracts on the site to which the employer, principal agent and agents shall have access at all times. The employer has the right to call for such further information from the contractor it deems necessary in the event it carries out any investigation or audit into potential fraud, corruption, fronting, health and safety incidents or verifying information the contractor has to supply to the employer in terms of this agreement. The Contractor shall ensure a similar right for the Employer with its subcontractors.	
	Sub-clause 3.10 is amended by replacing the words "principal agent" with the word "employer"	
	F:..... V:..... T:.....	Item
	Design responsibility (clause 4)	
	Clauses 4.1, 4.2 and 4.3 are deleted and replaced or amended as follows:	
	Sub-clause 4.1 To the extent that the contractor undertakes any design work, the contractor shall be responsible for the design of the works, including for any temporary works. The contractor shall be responsible for the primary coordination of design elements. All designs must be submitted to the Principal Agent and Employer for approval prior to construction of the works.	
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	Sub-clause 4.2 In alignment with clause 4.1 above, the contractor shall be responsible for any design of works undertaken by any subcontractor, including nominated or selected subcontractor.		
	Sub-clause 4.3 in second line delete the word "selected"		
4	F:..... V:..... T:..... Employer's agents (clause 5)	Item	
5	F:..... V:..... T:..... Contractor's Site representative (clause 6)	Item	
6	F:..... V:..... T:..... Compliance with Laws and Regulations (clause 7)	Item	
	Sub-clause 7.3 added: The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, Edition 23 (latest edition), Construction Regulation 2014 and the Code of Practice: All obligations in respect of health and safety requirements of the Contractor are set out in the Scope of Work.		
	Sub-clause 7.3.1 is added: Notwithstanding any actions which the employer may take, the contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, Edition 23 (latest edition), Construction Regulation 2014 for which the contractor is liable as mandatory.		
	By entering into this agreement, it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act and will enter into the mandatory agreement as set out in the Scope of Work.		
	This clause will be sufficient to establish the mandatory obligations of the contractor in the event the parties fail to execute the aforesaid mandatory agreement.		
7	F:..... V:..... T:..... Works risk (clause 8)	Item	
	Carried Forward		R
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	Brought Forward		R
8	F:..... V:..... T:..... Indemnities (clause 9)	Item	
9	F:..... V:..... T:..... Works insurances (clause 10)	Item	
10	F:..... V:..... T:..... Liability insurances (clause 11)	Item	
11	F:..... V:..... T:..... Effecting insurance (clause 12)	Item	
12	F:..... V:..... T:..... No Clause Security (clause 14) Sub-clause 14.1 is amended by replacing it with: Retain sub-clause 14.1 but amend to read: "The employer shall have the right to choose the security to be provided in terms of 14.3 or 14.4 as stated in the schedule. The contractor shall provide the security required or chosen by the employer in the schedule substantially in the format prescribed in the tender documents that the contractor submitted a tender offer. The required security shall be provided in the time period prescribed by the employer in the conditional letter of acceptance of the contractor's tender offer. Amend sub-clause 14.3 Retain clause 14.3 but in the last line of sub-clause 14.3.1 replace "twelve point five (12.5%)" with "ten (10%)" Amend sub-clause 14.4 Retain clause 14.4 but in the last line of sub-clause	Item	
	Carried Forward		R
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	Brought Forward		R
	14.4.1 replace "seven point five (7.5%)" with "ten (10%)" Add sub-clause 14.7(a) before clause 14.7: The construction guarantee provided by the contractor shall remain valid for the term of the agreement until the defect's liability period. In case of extensions, the security must also be extended or replaced by another construction guarantee of the same value, with an effective term equal to the term of extension. If the contractor fails to keep valid security for the duration of the agreement, the principal agent shall deduct an amount of 10% from each interim payment certificate and withhold the amount until the contractor provides a valid construction guarantee. Once the contractor provides the valid construction guarantee, the principal agent will then release the amount held from each payment certificate in the next payment certificate. Sub-clause 14.7.1 is amended by replacing the percentage of "two point five (2.5%)" with "five (5%)" in both the second and third line. Sub-clause 14.9 is added: A payment reduction of five (5%) of the value of each payment certificate up to a maximum of five (5%) of the contract sum will be applied until practical completion. At practical completion the amount withheld will be reduced to two point five (2.5%), which amount will reduce to nil (0%) when the final account is issued. The employer reserves the right to use retention money to correct defects where contractor fails to correct, fails or refuses to pay service provides or its subcontractors.		
13	F:..... V:..... T:..... <u>Execution (A15-A23)</u> Preparation for and execution of the works (clause 15) fixed	Item	
14	F:..... V:..... T:..... Sub-clause 15.1 is amended by replacing the words "principal agent" with the word "employer" Access to the works (clause 16)	Item	
15	F:..... V:..... T:.....	Item	
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	Brought Forward		R
	Contract instructions (clause 17)		
16	F:..... V:..... T:.....	Item	
	Setting out of the works (clause 18)		
17	F:..... V:..... T:.....	Item	
	Assignment (clause 19)		
18	F:..... V:..... T:.....	Item	
	Clause 19 Delete clause 19 in its entirety and replace it with the following: 19.1 The contractor does not cede, delegate or assign any of its rights or obligations to any person. 19.2 Notwithstanding the above, the employer may, on written notice to the contractor, cede and delegate, handover, its rights and obligations under this contract to a Related Party or a Client of the employer. On cession the Client becomes the employer and takes full responsibility. For the purpose hereof the above clause: 19.2.1 a "Related Party" means any entity that directly or indirectly, through one or more intermediaries, controls or is controlled by, or is under common control with the employer and includes any other "Organ of State" as defined in section 239 of the Constitution of the Republic of South Africa, 1996 and any entity or Organ of State for whom the Employer carries out the works or acts as an implementing agent, ("control" means the beneficial ownership of the majority in number of the issued equity of any entity (or the whole or majority of the entity's assets), and/or the right or ability to direct or otherwise control the entity or the votes attaching to the majority of the entity's equity and "controlled" or "under common control" shall have a similar meaning); and client means the owner, funder and or sponsor of the project and or programme managed in terms of the MOA between the Client and DBSA		
	Nominated subcontractors (clause 20)		
19	F:..... V:..... T:.....	Item	
	Selected subcontractors (clause 21)		
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20	F:..... V:..... T:..... Employer's Direct Contractors (clause 22)	Item	
21	F:..... V:..... T:..... Contractor's Domestic Sub-Contractors (Clause 23) Sub-clause 23.3 is added: The contractor may not subcontract the whole of the work without the written instruction or approval of the employer. In such event the employer may require the contractor to cede the contract to the subcontractor. Sub-clause 23.4 is added: The subcontractors appointed by the contractor to comply with the developmental and transformation requirements from the employer in terms of applicable legislation ,including but not limited to the Preferential Procurement Policy Framework Act, 5 of 2000, and regulation thereto, will be domestic subcontractors for purposes of this agreement, and sub-clauses 23.1 and 23.2 will apply accordingly. Sub-clause 23.5 is added: The contractor shall submit the agreement for each subcontract to the Principal Agent and may redact all commercially sensitive information Sub-clause 23.6 is added: Contractors failure to pay Subcontractors If the contractor fails to make payment of any amount due and payable to a subcontractor ("the Subcontractor debt") and the Principal Agent considers that the subcontractor debt has an adverse impact(s) on the progress of the works or the obligations of the contractor under the agreement, the Principal Agent may request evidence of payment to the subcontractor. In the absence of such evidence, the employer may (at its own discretion) pay the subcontractor debt directly to the subcontractor concerned.	N/A	
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	Brought Forward		R
	Such payment is, for all purposes under the agreement, regarded as a payment made on behalf of the contractor and at the request of and with the approval and consent of the contractor, as a payment towards the contract sum. As such, payment to the contractor shall be less the payment to the subcontractor. All adverse effects as a result of or arising from the subcontractor debt does not entitle the contractor to any cost or time.		
22	F:..... V:..... T:..... <u>Completion (A24-A30)</u> Practical completion (clause 24)	Item	
23	F:..... V:..... T:..... Works completion (clause 25)	Item	
24	F:..... V:..... T:..... Final completion (clause 26)	Item	
25	F:..... V:..... T:..... Latent defects liability period (clause 27)	Item	
26	F:..... V:..... T:..... Sectional completion (clause 28)	Item	
27	F:..... V:..... T:..... Revision of date of practical completion (clause 29)	Item	
28	F:..... V:..... T:.....	Item	
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	Penalty for non-completion (clause 30)		
	The penalty per calendar day to be calculated as per the "Public Works QS 002 Procurement Documentation Guidelines for Building Contracts dated February 2021" formula on calculations of penalties up to a maximum of 10% of the contract sum.		
	Thereafter, the employer shall have a right during the identified delay period to intervene and accelerate the work or appoint a third party to assist or complete the works to reach practical completion at the planned period. The cost of the appointed third-party work shall be borne by the contractor. The Employer may at its own discretion terminate this agreement if the contractor's penalties reach the maximum of 10% of the contract sum.		
	Sub-clause 30.1 is amended by replacing the reference to sub-clause "36.3" with clause "36.0".		
29	F:..... V:..... T:.....	Item	
	Payment (A31 - A35)		
	Interim payment (clause 31)		
	Sub-clause 31.9 is amended by replacing the term of "seven (7) calendar days" in the first line with the term of "thirty (30) calendar days"		
	Sub-clause 31.12 is amended by deleting the sentence: "Payment shall be subject to the employer giving the contractor a tax invoice for the amount due."		
30	F:..... V:..... T:.....	Item	
	Adjustment to the contract value (clause 32)		
31	F:..... V:..... T:.....	Item	
	Recovery of expense and loss (clause 33)		
32	F:..... V:..... T:.....	Item	
	Final account and final payment (clause 34)		
	Carried Forward		R
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	Sub-clause 34.13 is amended by deleting the words "subject to the employer giving the contractor a tax invoice for the amount due"		
33	F:..... V:..... T:.....	Item	
	Payment to other parties (clause 35)		
34	F:..... V:..... T:.....	Item	
	<u>Cancellation (A36-A39)</u>		
	Cancellation by employer - contractor's default (clause 36)		
35	F:..... V:..... T:.....	Item	
	Cancellation by employer - loss and damage (clause 37)		
36	F:..... V:..... T:.....	Item	
	Cancellation by contractor-employer's default (clause 38)		
37	F:..... V:..... T:.....	Item	
	Cancellation - cessation of the works (clause 39)		
38	F:..... V:..... T:.....	Item	
	<u>Dispute (A40)</u>		
	Settlement of Disputes (clause 40)		
	Retention of Clause 40 in respect of dispute settlement to be retained in its original form not applying the state clause amendments.		
39	F:..... V:..... T:.....	Item	
	Carried Forward		R
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	Brought Forward		R
	<u>SUBSTITUTE PROVISIONS</u>		
	<u>State Clauses (A41)</u>		
	Clause 41.0		
	Clause 41 State Substitutions is amended as set out below with reference to sub-clause 41.1 or the original clause number stated therein.		
	In sub-clause 41.1.3 the definition for CONSTRUCTION PERIOD is amended to read:		
	CONSTRUCTION PERIOD means a duration of 18 months commencing from the period the contractor takes possession of the sites to the date the certificate of practical completion is issued.		
	Clause 39.2 to be amended as follows: delete the third sentence and replace with the following: "The employer shall pay the contractor all amounts due in terms of the contract for work completed at the date of termination or cancellation in terms of this clause 39.2, including retention money after deducting any amounts due to the employer. The employer will also return any guarantees still valid to the contractor after such cancellation."		
	Clauses 39.2.1 to 39.2.3 no clause		
	Add sub- clause 41.1.4		
	Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor, or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a stated date and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever.		
40	F:..... V:..... T:.....	Item	
	<u>CONTRACT VARIABLES</u>		
	THE SCHEDULE (C1.2: CONTRACT DATA) (clause 42)		
	Carried Forward		R
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41	F:..... V:..... T:..... <u>Tenderers are referred to document C1.2: Contract Data (Volume 3) for variables pertaining to this contract</u> <u>THE SCHEDULE</u> Post-tender Provisions (clause 41)	Item	
42	F:..... V:..... T:..... Contractual Agreement (clause 42)	Item	
43	F:..... V:..... T:..... <u>SECTION B: PRELIMINARIES</u> <u>Definition and interpretation (B1)</u> Definition and interpretation (B1.1 - B1.4.6) See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section	Item	
44	F:..... V:..... T:..... <u>Documents (B2)</u> Checking of documents (B2.1)	Item	
45	F:..... V:..... T:..... Provisional bills of quantities (B2.2)	Item	
46	F:..... V:..... T:..... Availability of construction documentation (B2.3)	Item	
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47	F:..... V:..... T:..... Interests of agents (B2.4)	Item	
48	F:..... V:..... T:..... Priced documents (B2.5)	N/A	
49	F:..... V:..... T:..... Tender submission (B2.6) Clause 2.6 is amended by replacing “JBCC Form of Tender” with “Form of Offer and Acceptance (C1.1)”	Item	
50	F:..... V:..... T:.....	Item	
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<u>The Site (B3)</u>			
	Defined works area (B3.1)		
51	F:..... V:..... T:.....	Item	
	Geotechnical investigation (B3.2)		
52	F:..... V:..... T:.....	Item	
	Inspection of the site (B3.3)		
53	F:..... V:..... T:.....	Item	
	Tenderers shall complete the Tender briefing meeting attendance certificate and return the same with the tender submission. Tenderers are encouraged to inspect the various school sites as they deem necessary.		
	Existing premises occupied (B3.4)		
54	F:..... V:..... T:.....	Item	
	Previous work - dimensional accuracy (B3)		
55	F:..... V:..... T:.....	N/A	
	Previous work - defects (B3.6)		
56	F:..... V:..... T:.....	N/A	
	Services - known (B3.7)		
57	F:..... V:..... T:.....	Item	
	Services - unknown (B3.8)		
58	F:..... V:..... T:.....	Item	
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	Protection of trees etc (B3.9)		
59	F:..... V:..... T:.....	Item	
	Articles of value (B3.10)		
60	F:..... V:..... T:.....	Item	
	Inspection of adjoining properties etc (B3.11)		
61	F:..... V:..... T:.....	Item	
	<u>Management of contract (B4)</u>		
	Management of the works (B4.1)		
62	F:..... V:..... T:.....	Item	
	Programming for the works (B4.2)		
63	F:..... V:..... T:.....	Item	
	Progress meetings (B4.3)		
64	F:..... V:..... T:.....	Item	
	Technical meetings (B4.4)		
65	F:..... V:..... T:.....	Item	
	Labour and plant records (B4.5)		
66	F:..... V:..... T:.....	Item	
	<u>Samples, shop drawings and manufacturer's instructions (B5)</u>		
	Samples of materials (B5.1)		
67	F:..... V:..... T:.....	Item	
	Workmanship samples (B5.2)		
	Carried Forward		R
	Section No. 1		
	Bill No. 1		
	PRELIMINARIES AND GENERAL		

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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	Brought Forward		R
68	F:..... V:..... T:..... Shop drawings (B5.3)	Item	
69	F:..... V:..... T:..... Compliance with manufacturer's instructions (B5.4)	Item	
70	F:..... V:..... T:..... <u>Temporary works and plant (B6)</u> Deposits and fees (B6.1)	Item	
71	F:..... V:..... T:..... Enclosure of the works (B6.2)	Item	
72	F:..... V:..... T:..... Advertising (B6.3)	Item	
73	F:..... V:..... T:..... Plant, equipment, sheds and offices (B6.4)	Item	
74	F:..... V:..... T:..... Main notice board (B6.5)	Item	
75	F:..... V:..... T:..... Subcontractors notice board (B6.6)	Item	
76	F:..... V:..... T:..... <u>Temporary services (B7)</u> Location (B7.1)	N/A	
	Carried Forward		R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

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	Brought Forward		R
77	F:..... V:..... T:..... Water (B7.2)	Item	
78	F:..... V:..... T:..... Electricity (B7.3)	Item	
79	F:..... V:..... T:..... Telecommunication equipment (B7.4)	Item	
80	F:..... V:..... T:..... Ablution facilities (B7.5)	Item	
81	F:..... V:..... T:..... <u>Prime cost amounts (B8)</u> Responsibility for prime cost amounts (B8.1)	Item	
82	F:..... V:..... T:..... <u>Attendance on N/S Subcontractors (B9)</u> General attendance (B9.1)	Item	
83	F:..... V:..... T:.....	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

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	Brought Forward		R
	Special attendance (B9.2)		
	Commissioning - Fuel, water and power (B9.3)		
84	F:..... V:..... T:.....	Item	
	<u>Financial aspects (B10)</u>		
	Statutory taxes, duties and levies (B10.1)		
85	F:..... V:..... T:.....	Item	
	Payment of preliminaries (B10.2) Alternative A		
86	F:..... V:..... T:.....	Item	
	Adjustment of preliminaries (B10.3)		
	Clauses B10.3.1 and B10.3.2 are amended by replacing “within fifteen (15) working days of taking possession of the site” with “when submitting his priced bills of quantities / lump sum document”		
87	F:..... V:..... T:.....	Item	
	Payment certificate cash flow (B10.4)		
88	F:..... V:..... T:.....	Item	
	<u>General (B11)</u>		
	Protection of works (B11.1)		
89	F:..... V:..... T:.....	Item	
	Protection/isolation of existing/sectionally occupied works (B11.2)		
90	F:..... V:..... T:.....	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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	Brought Forward		R
	Security of works (B11.3) W296+W296		
91	F:..... V:..... T:.....	Item	
	Notice before covering work (B11.4)		
92	F:..... V:..... T:.....	Item	
	Disturbance (B11.5)		
93	F:..... V:..... T:.....	Item	
	Environmental disturbance (B11.6)		
94	F:..... V:..... T:.....	Item	
	Works cleaning and clearing (B11.7)		
95	F:..... V:..... T:.....	Item	
	Vermin (B11.8)		
96	F:..... V:..... T:.....	Item	
	Overhand work (B11.9)		
97	F:..... V:..... T:.....	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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	Brought Forward		R
	Instruction manuals and guarantees (B11.10)		
98	F:..... V:..... T:.....	Item	
	As built information (B11.11)		
	Tenants installations (B11.12) N/A		
99	F:..... V:..... T:.....	Item	
	<u>Schedule of variables (B12)</u>		
	Pre-tender information (B12.1)		
100	F:..... V:..... T:.....	Item	
	This schedule contains all variables referred to in this document and is divided into pre-tender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries. Spaces requiring information must be filled in, shown as “not applicable” or deleted and not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross-referenced to the applicable clause of the schedule. Key cross reference clauses are italicised in [] brackets 12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: Yes 12.1.2 Availability of construction documentation (B2.3) Construction documentation is complete : Yes 12.1.3 Interest of agents (B2.4) N/A		
	Carried Forward		R
	Section No. 1		
	Bill No. 1		
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Brought Forward		R
12.1.4 Defined works area (B3.1)		
The area of the works to be occupied by the contractor is indicated on the architects drawings and the contractor is to liaise with the principal agent in connection with the limits of access.		
12.1.5 Geotechnical investigation (B3.2)		
Yes		
12.1.6 Existing premises occupied (B3.4)		
No		
12.1.7 Previous work – dimensional accuracy		
N/A		
12.1.8 Previous work – defects		
N/A		
12.1.9 Services - known (B3.7)		
All services are known and the contractor is advised to review all drawing and municipal service points		
12.1.10 Protection of trees (B3.9)		
Trees shall be protected in accordance with the Representative/Agent instructions		
12.1.11 Inspection of adjoining properties (B3.11)		
All by laws of the relevant municipal shall be adhered to		
12.1.12 Enclosure of the works (B6.2)		
The contractor must make provision for fencing the contractor's yard/camp site with a suitable fence at least 1,8m high with lockable access gates, which must be maintained during the construction period and removed on completion of the works		
12.1.13 Offices (B6.4.3)		
Carried Forward		R
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

12.1.14 Main notice board (B6.5) Specific requirements: The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 2.75 x 3.7m as per the specification and the drawing annexed to these bills of quantities for tender purposes, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces 12.1.15 Subcontractors notice board (B6.6) A notice board is required : No 12.1.16 Water (B7.2) Option : A (by contractor) 12.1.17 Electricity (B7.3) Option: A (by contractor) 12.1.18 Telecommunications (B7.4) The contractor shall provide telecommunication facilities 12.1.19 Ablution facilities (B7.5) Option : A (by contractor) 12.1.20 Special attendance (B9.2) Subcontractor (1) details: N/A 12.1.21 Protection of the works (B11.1) All works protected 12.1.22 Protection of existing/sectionally occupied works (B11.2)	Brought Forward	R
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL	Carried Forward	R

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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	Brought Forward		R
	12.1.23 Disturbance (B11.5)		
	Specific requirements: The contractor shall exercise dust and sand control by watering the site regularly and/or by using any other suitable measures such as providing, erecting and removing on completion of the works all necessary temporary dust screens, all to the satisfaction of the principal agent.		
	12.1.24 Environmental disturbance		
	Specific requirements: N/A		
	<u>Post tender information (B12.2)</u>		
	12.2.1 Payment of preliminaries		
	Option : A		
	12.2.2 Adjustment of preliminaries		
	12.2.3 Additional agreed preliminaries items		
	N/A		
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>		
	Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included		
	Site instructions		
	Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor		
101	F:..... V:..... T:.....	Item	
	Black economic empowerment and training		
102	F:..... V:..... T:.....	Item	
	Proprietary branded products		
	Carried Forward		R
	Section No. 1		
	Bill No. 1		
	PRELIMINARIES AND GENERAL		

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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	Brought Forward		R
103	F:..... V:..... T:..... Testing of flat roof waterproofing for water tightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the water tightness of the waterproofing and before any further construction work is carried out above the waterproofing	Item	
104	F:..... V:..... T:..... The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative Contract instructions Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor	Item	
105	F:..... V:..... T:..... Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week	Item	
106	F:..... V:..... T:.....	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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	Brought Forward		R
	Plant record		
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week		
107	F:..... V:..... T:.....	Item	
	Guarantees		
	Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract		
	The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so.		
	This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement		
108	F:..... V:..... T:.....	Item	
	Overtime		
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer		
109	F:..... V:..... T:.....	Item	
	Carried Forward		R
	Section No. 1		
	Bill No. 1		
	PRELIMINARIES AND GENERAL		

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	Brought Forward		R
	Co-operation of contractor for cost management		
	It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget.		
	The quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors		
110	F:..... V:..... T:..... Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occupational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionnaire" The contractor to comply with all provisions of the above and to be enforced on all selected and or other sub-contractors, as no claim afterwards will be entertained Occupational Health and Safety Specification	Item	
111	F:..... V:..... T:..... <u>SUMMARY OF CATEGORIES</u> Category : Fixed R..... Category : Value R..... Category : Time R.....	Item	
	Carried to Final Summary		R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL		

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 1</u>			
	<u>ALTERATIONS TO EXISTING BUILDING</u>			
	<u>REMOVAL OF EXISTING WORK</u>			
	<u>Breaking down and removing brickwork etc</u>			
1	190mm block wall	m2	81	
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc.</u>			
2	Take out and remove existing vinyl floor	m2	159	
3	Take out and remove existing ceramic floor tiles	m2	37	
4	Take out and remove existing ceramic wall tiles	m2	229	
5	Take out and remove existing roof	m2	52	
6	Take out and remove existing ceilings	m2	167	
7	Take out and remove existing double door and frame	No	4	
8	Take out and remove existing roller shutter door	No	11	
9	Take out and remove existing single door and frame	No	15	
10	Take out and remove existing window including frame	No	11	
	<u>Taking out and removing sanitary fittings, tanks, geysers, etc, including disconnecting from pipes, traps, etc and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>			
11	Water Closet	No	9	
12	Wash Hand Basin	No	12	
13	Urinals	No	2	
	<u>BUILDING UP OPENINGS</u>			
14	Brick up existing opening for single door	No	2	
	Carried Forward			
	Section No. 2			
	Bill No. 1			
	ALTERATIONS			

R

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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					R
	Brought Forward				
15	Brick up existing opening for double door	No	1		
16	Brick up existing opening where windows removed	No	4		
17	Build up opening to create opening for window	No	14		
	<u>MAKING GOOD OF EXISTING WORK</u>				
18	Remove floor finish and make good floors	m2	244		
	<u>EXISTING ELECTRICAL WORK</u>				
	<u>REMOVAL OF EXISTING ELECTRICAL WORK ON MASONRY, CARPENTRY AND ABLUTION BLOCKS</u>				
19	Allow a budgetary amount of R60 000,00 (Sixty Thousand Rands) for the Removal of Existing Electrical Work		Item		60 000,00
	<u>EXISTING SEWER MANHOLES</u>				
	<u>EXISTING SEWER MANHOLES</u>				
20	Allow a budgetary amount of R15 000,00 (Fifteen Thousand Rands) for the Closing off of Two Existing Mnholes		Item		
	Carried Forward to Summary of Section No. 2				
	Section No. 2				
	Bill No. 1				
	ALTERATIONS				

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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BILL OF QUANTITIES**

Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 2</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured			
	<u>Carting away of excavated material</u>			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	108	
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>			
	Carried Forward			
	Section No. 2 Bill No. 2 EARTHWORKS			R

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
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BILL OF QUANTITIES**

Brought Forward			R
<u>Open face excavation in earth</u>			
2	Reduced levels under floors	m3	15
<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	32
<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	4
5	Hard rock	m3	2
<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor off site (provisional)	m3	31
<u>Risk of collapse of excavations</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	93
<u>Keeping excavations free of water</u>			
8	Keeping excavations free of water other than subterranean water	Item	
<u>FILLING ETC</u>			
<u>Imported G5 earth filling supplied by the contractor compacted to 95% Mod ASSHTO density in 150mm layers</u>			
9	Under floors, footings, etc	m3	26
<u>Compaction of surfaces</u>			
10	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	144
Carried Forward			R
Section No. 2 Bill No. 2 EARTHWORKS			

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BILL OF QUANTITIES**

Brought Forward			R
<u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u>			
11	Modified AASHTO Density test	No	4
<u>SOIL POISONING</u>			
<u>Soil insecticide in accordance with SANS 5859</u>			
12	To bottoms and sides of trenches etc	m2	129
13	Under floors etc. including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	108
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 2			
EARTHWORKS			

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BILL OF QUANTITIES**

Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 3</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)</u>			
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.			
	Formwork to soffits of (solid) slabs etc shall be deemed to be to slabs not exceeding 255mm thick unless otherwise described			
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons.			
	All Concrete grades/strengths are to the engineer's specifications as detailed on engineer's drawings			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect.			
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	Carried Forward			
	Section No. 2 Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT			R

IKHALA - STERKSPRUIT BUSINESS CAMPUS
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BILL OF QUANTITIES

Brought Forward			R
<u>15MPa/19mm concrete</u>			
1	Surface blinding under footings and bases	m3	2
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>25Mpa/19mm concrete</u>			
2	Strip Footings	m3	7
<u>25MPa/19mm concrete</u>			
3	Surface beds	m3	9
<u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u>			
<u>25MPa/19mm concrete</u>			
4	Aprons	m3	2
<u>TEST CUBES</u>			
5	Making and testing 150 x 150 x 150mm concrete strength test cube	No	3
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a power float</u>			
6	Surface beds, slabs, etc	m2	108
<u>FORMWORK</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Rough formwork to sides and soffits of:</u>			
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	33
<u>REINFORCEMENT (PROVISIONAL)</u>			
Carried Forward			R
Section No. 2			
Bill No. 3			
CONCRETE, FORMWORK AND REINFORCEMENT			

IKHALA - STERKSPRUIT BUSINESS CAMPUS UPGRADES OF EXISTING FACILITIES BILL OF QUANTITIES

Brought Forward		R
<u>Fabric reinforcement</u>		
8	Ref 395 fabric reinforcement in concrete surface beds, slabs, etc	m2 144
Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT		R

Item No	Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u>			
<u>BILL NO 4</u>			
<u>MASONRY (PROVISIONAL)</u>			
Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Reinforced brick lintels</u>			
Lintels shall bear at least 200mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
<u>SAMPLES</u>			
Samples of all masonry building units, shall consist of a minimum of 6 units			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX imperial bricks (14 MPa nominal compressive strength) in class 1 mortar</u>			
1	One brick wall	m2	42
<u>SUPERSTRUCTURE</u>			
2	Half brick walls	m2	114
3	One brick walls	m2	203
Carried Forward			R
Section No. 2 Bill No. 4 MASONRY			

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BILL OF QUANTITIES

Brought Forward			R
4	190mm Thick Blockwork	m2	13
5	Half brick walls as beamfilling	m2	5
<u>FACE BRICKWORK</u>			
<u>Clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints to match existing</u>			
6	Face brick soldier course sills 230mm wide	m	25
<u>SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
7	75mm Wide reinforcement built in horizontally	m	447
8	150mm Wide reinforcement built in horizontally	m	1 328
<u>Concrete prestressed fabricated lintels minimum 45MPa</u>			
9	110 x 75mm Lintels in lengths not exceeding 3m	m	34
<u>FIBRE-CEMENT WINDOW SILLS</u>			
<u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc</u>			
10	10 x 150mm Wide sills set flat and slightly projecting	m	25
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 4			
MASONRY			

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BILL OF QUANTITIES

Brought Forward			R
	<u>Remove loose paint from previously painted surfaces. Scrub and wash with galvanised iron cleaner. Rinse thoroughly with clean water. Sand or abrade to remove any rust stains, wipe clean and treat affected areas with a rust remover. Where galvanised Steel was unavoidably welded on site, clean joint and cold galvanise to approval. Paint galvanised steel by applying two (2) coats emulsion roof paint to comply with SABS 940.</u>		
4	On Roofs	m2	1 007
Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 5 WATERPROOFING			R

Item No	Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u> <u>BILL NO. 6</u> <u>ROOF COVERINGS, CLADDINGS, ETC</u> NOTE: Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes. <u>General</u> All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched. Where described as with "Chromadeck" or other similar approved finish, all sheets, flashings, etc., shall be with "Chromadeck" or other similar approved silicone polyester paint for exterior use. <u>Sizes</u> All items are measured net unless otherwise described. <u>Flashings, trimming plates, etc.</u> Prices to include for all cuttings and waste and relevant fixing material, unless otherwise described. All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheets steel roof covering where applicable. All items are, unless otherwise described, measured net. <u>ROOF SHEETS</u>			
Carried Forward			R
Section No. 2 Bill No. 6 ROOF COVERING			

IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES

	Brought Forward			R
	<u>0.8mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centres giving a nett cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 285mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on one side with Z275 galvanising (commercial quality) to SABS 934 or later editions laid on approve insulation on structural Timber/Steel structure incorporating all necessarily accessories such as flashings and eave closers in strict compliance to Manufacturers instructions.</u>			
1	Roof covering with a 20 degree pitch	m2	161	
2	Ridge capping 550mm girth	m	72	
	<u>ROOF AND WALL INSULATION</u>			
	<u>4mm Alububble 1983 D10 both sides reflective foil. To be stapled under timber battens as per manufacturer's instructions.</u>			
3	Thermal insulation built to underside of roof profile to manufacturer's recommendation	m2	161	
Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 6 ROOF COVERING				R

Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 7</u>			
	<u>CARPENTRY AND JOINERY</u>			
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Joinery			
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	Fixing			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Decorative laminate finish			
	Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish			
	<u>PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC</u>			
	<u>Prefabricated timber roof trusses</u>			
	The following is applicable in respect of roof trusses:			
	Timber roof structure shall be fully designed, constructed of South African pine and certified on completion by a firm of specialist timber roof designers and manufacturers. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the Architect and/ or the site before design or fabrication commences.			
	Carried Forward			
	Section No. 2 Bill No. 7 CARPENTRY AND JOINERY		R	

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward			R
Prices shall include designs and certification on completion. The designs shall be availed to the structural engineer on award of the contract.			
Prices shall include for all ridge boards, hip or valley rafters, bracing, splay cut ends, mitres, jointing, wrought and shaped ends, wall plates, connections, bolts, cleats, gussets, and timber connectors.			
<u>Roof truss installation to be certified by an independent engineer at the contractors expense. Certificate to be presented to Principal Agent prior to commencement of roof coverings. (Contractor to adjust construction program accordingly). Area measured on plan</u>			
1	Roof construction to double pitched roof overall size 15,61m x 9,7m (151m2) measured flat on plan made up of engineered prefabricated timber roof trusses as manufactured by "gangnail" or equal approved. pitch 9°. trusses spaced at max. 1100mm c/c. and fixed to walls with 32 x 1,6mm thick galvanised hoop iron strap, build 510mm into brickwork or embedded 300mm deep into reinforced concrete beams. All exposed timber to be finished and treated with "cca tanalith" or an approved black tar paint.		
	-Ablution Block	m2	151
<u>EAVES, VERGES, ETC</u>			
<u>Sawn Softwood</u>			
2	38 x 114mm Wall plates	m	70
<u>"Everite" medium density plain nutec-cement or similar approved</u>			
3	12 x 225mm Fascia boards, including aluminium H-profile jointing strips	m	143
4	12 x 225mm Barge boards, including aluminium H-profile jointing strips	m	73
<u>DOORS ETC</u>			
Door finishes, ironmongery and frames are measured elsewhere			
Carried Forward			R
Section No. 2 Bill No. 7 CARPENTRY AND JOINERY			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward			R
<u>The following door descriptions are to be read in conjunction with the attached window/door schedule No.: WS-700-01/DS-600-01 respectively</u> <u>Internal Doors</u> <u>44mm thick solid core door to comply with SABS 545 in pressed steel door frame (Frame elsewhere measured)</u>			
5	1629 x 2030 internal double door to 190mm wall	No	2
6	813 x 2032 external single door to 190mm wall - D02	No	4
<u>44mm thick interior grade solid core timber door with 3mm thick ply on both sides with 2 consolidated edges fitted to comply with SABS 545 in Steel frame in pressed steel door frame (Frame elsewhere measured)</u>			
7	813mm x 1932mm internal single door to - D02	No	19
8	915mm x 2032mm internal single door to - D03	No	2
<u>External Doors</u> <u>44mm thick solid core door to comply with SABS 545 in pressed steel door frame (Frame elsewhere measured)</u>			
9	813 x 2032 external single door to 190mm wall	No	14
<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>			
10	Parrot Bulletin board aluminium frame or similar approved 2400x1200mm Anodized Aluminium frame pinnable felt notice board with landscape orientation and concealed wall fixing kit included, colour: Laurel Grey, fabric type: Wool Felt with SABS Class 3 fire rating mounted at 1200mm height from FFL	No	5
<u>BLINDS</u>			
11	Blind Size 1302 x 1911 for Window Type SS44	No	12
Carried Forward			R
Section No. 2 Bill No. 7 CARPENTRY AND JOINERY			

IKHALA - STERKSPRUIT BUSINESS CAMPUS UPGRADES OF EXISTING FACILITIES BILL OF QUANTITIES

Brought Forward			R
12	Blind Size 1302 x 1445 for Window Type SS43	No	21
13	Blind Size 1302 x 978 for Window Type SS42	No	5
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 7			
CARPENTRY AND JOINERY			

Item No	Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u>			
<u>BILL NO 8</u>			
<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere			
<u>Ceilings</u>			
Unless otherwise described ceilings shall be deemed to be horizontal			
<u>Bulkheads</u>			
Bulkheads are defined as those portions of ceilings which are stepped down from the general ceiling level in a particular room or area and which generally occur along the perimeter. Their purpose is either to conceal services or to create architectural features			
Bulkheads have only been described as such where they conform to the above definition and where the horizontal or vertical dimensions do not exceed 1200mm. Where these dimensions are more than 1200mm or such that linear measurement is not practicable such portions of bulkheads have been included in the appropriate items			
Unless otherwise described bulkheads shall be deemed to be horizontal along the length			
<u>Steel components</u>			
All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121			
<u>CEILING TIMBERS, BEADS, INSULATION, ETC</u>			
Carried Forward			R
Section No. 2 Bill No. 8 CEILINGS, PARTITIONS, ETC.			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward			R
<u>Non-combustible, lightweight glass wool insulation 135mm thick with reinforced foil facing on one side. Laid on ceiling with 50mm overlap over brandering.</u>			
1	'Aerolite' glass wool ceiling insulation 135mm thick	m2	490
<u>SUSPENDED CEILINGS</u>			
<u>6.4mm skimmed Gypsum plastered ceiling boards (to comply with SANS 266 or later revision) installed with longer lengths to suit room configurations with 'wire scrim tape' fixed over all joints and plastered with 6mm thick light weight hemi-hydrate gypsum painted, finished with 3no. coats of super PVA external quality pint; colour ro PA's approval. Ceiling to be fixed to timber brandering with all necessary accessories to strict manufacturer's specifications. Colour and finish to match existing</u>			
2	Ceilings suspended not exceeding 1m below timber purlins	m2	490
3	Extra over ceiling for Pelican standard 600 x 600mm trap door supported by 38 x 38mm wrought softwood rebated framing fitted flush in opening	No	14
<u>CORNICES</u>			
<u>Gypsum coved cornice</u>			
4	75 x 75mm Gyproc RhinoArt cove cornice, or acceptable equivalent	m	191
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 8			
CEILINGS, PARTITIONS, ETC.			

Item No	Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u>			
<u>BILL NO 9</u>			
<u>FLOOR COVERINGS, WALL LININGS, ETC</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Fixing</u>			
Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
All carpets lain to floors are deemed to include underlay			
<u>FLOOR COVERINGS</u>			
<u>20 000mm x 1500mm Heavy-duty recycled rolled rubber flooring with a thickness of 15mm, 20mm-25mm thick, designed for workshop and industrial applications, to offer high impact resistance, superior shock absorption, and slip resistance for enhanced safety and durability. Installed using the glue-down installation method to ensure a secure, seamless surface, reducing movement under heavy-traffic conditions. The flooring should be resistant to abrasions, oils and chemicals, providing long-term performance in demanding environments while also reducing noise and vibration.</u>			
1	On floors	m2	393
<u>SKIRTINGS, NOSINGS, ETC</u>			
Carried Forward			R
Section No. 2 Bill No. 9 FLOOR COVERINGS			

IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES

Brought Forward			R
<u>19mm x 76mm selected Meranti skirting slightly rounded on top leading edge and ploughed on rear face, steel nailed to walls at 600mm centres. The skirting is to have splayed header joints and mitred angles, complete with 19mm quarter round. Stop, sand down and prepare Meranti wood surfaces. Apply three (3) coats high gloss clear varnish to interior Meranti wood surfaces. All to manufacturer's specifications and recommendations. Note: All linear jointing to skirting to be vertically right angled butt jointed. ALL PAINTING AND FLOOR FINISH TO BE COMPLETE PRIOR TO SKIRTING FIXING. FLOOR FINISH TO BE MASKED DURING FINAL COAT OF SKIRTING VARNISH. All to manufacturer's specifications and recommendations.</u>			
2	Meranti Skirting	m	256
3	Apply three (3) coats high gloss clear varnish to interior Meranti wood surfaces. All to manufacturer's specifications and recommendations.	m	256
<u>POLISH, SEALERS, ETC</u>			
4	Three coats wax polish on vinyl flooring	m2	393
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 9			
FLOOR COVERINGS			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 10</u>			
	<u>METALWORK</u>			
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Descriptions of bolts shall be deemed to include nuts and washers			
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
	Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Mild steel burglar bars to opening and fixed panels made up of 12mm diameter bar infill rails @ horizontal c/c welded together to architect's approval and built into brickwork</u>			
1	Burglar Bar for Size 1302 x 1911 for Window Type SS44	No	17	
2	Burglar Bar for Size 1302 x 1445 for Window Type SS43	No	21	
3	Burglar Bar for Size 1302 x 978 for Window Type SS42	No	5	
4	873 x2570 Purpose made Mild-Steel Grille gate painted blue	No	13	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,6mm galvanized mild steel double rebated frame suitable for one brick wall</u>			
5	Frame for door 813 x 2032mm high	No	14	
	Carried Forward			R
	Section No. 2 Bill No. 10 METALWORK			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward			R
<u>1,6mm galvanized mild steel double rebated frame suitable for half brick wall</u>			
6	Frame for door 813 x 1932mm high	No 19	
7	Frame for door 915 x 2032mm high	No 2	
<u>1,6mm galvanized mild steel double rebated frame suitable for 190mm Blockwall</u>			
8	Frame for door 813 x 1932mm high	No 4	
<u>STEEL WINDOWS, DOORS, ETC</u>			
9	Window size 1302 x 1911mm high (SS44)	No 12	
10	Window size 533 x 949mm high (NC5F)	No 16	
11	Window size 533 x 949mm high (C6F)	No 2	
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 10			
METALWORK			

Item No		Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u>				
<u>BILL NO 11</u>				
<u>PLASTERING</u>				
Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
<u>SCREEDS</u>				
<u>Screeds power floated on concrete</u>				
1	5mm thick self levelling screed on floors and landings	m2	169	
<u>INTERNAL PLASTER</u>				
<u>Single skin cement plaster mix proportions of cement to sand to be 1:4½, wood floated then steel trowelled to a smooth and even finish, on brickwork</u>				
2	On walls	m2	1 592	
3	To narrow widths	m2	127	
<u>EXTERNAL PLASTER</u>				
<u>Single skin cement plaster mix proportions of cement to sand to be 1:4½, wood floated then steel trowelled to a smooth and even finish, on brickwork</u>				
4	On walls	m2	970	
5	To narrow widths	m2	13	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 11				
PLASTERING				

Item No	Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u>			
<u>BILL NO 12</u>			
<u>TILING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Fixing</u>			
Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
Method of laying tiles to be confirmed prior (as some may/may not be laid on top of existing tiles).			
Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat			
Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" range of products as recommended by the manufacturer of the tiles			
All wall tiling is deemed to include expansion joint strips, etc			
<u>WALL TILING</u>			
<u>Supply, delivery and fixing of tiles allowing for all adhesives, grouts, labours and the like:</u>			
<u>Approved porcelain wall tiles, size 600mm x 300mm high glazed porcelain wall tiles, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications</u>			
1	On walls	m2	600
<u>FLOOR TILING</u>			
<u>Supply, delivery and fixing of tiles allowing for all adhesives, grouts, labours and the like:</u>			
Carried Forward			R
Section No. 2 Bill No. 12 TILING, ETC			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

		Brought Forward			R
	<u>Approved 600mm x 600mm x 9mm thick non-slip porcelain floor tiles in matt finish laid to approved pattern using approved adhesive and grout. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour and end finish to architects approval</u>				
2	On floors	m2	169		
Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 12 TILING, ETC					R

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 13</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
	<u>Holes for pipework is deemed to be included within the descriptions</u>			
	<u>RAINWATER DISPOSAL</u>			
	<u>"Mr. Gutter Ogee" or other equal and approved profile pre-coated aluminium seamless gutters</u>			
1	Aluminium Gutter 150mm x 150mm Aluminium alloy. Gauge 0,9mm dependent upon the profile, colour to Architects approval	m	143	
2	Seamless Aluminium Rain water down pipe 100mm x 75mm Aluminium alloy. Gauge 0,9mm, colour to be Architect's approval	m	25	
3	Extra over eaves gutter for stopped end	No	22	
4	Extra over eaves gutter for outlet for 150mm diameter pipe	No	41	
5	Extra over rainwater pipe for offset	No	41	
6	Rain water shoe	No	41	
	<u>SANITARY PLUMBING</u>			
	<u>SANITARY FITTINGS, ETC</u>			
	Supply, delivery and installation of sanitary ware items ; fix accordingly allowing for all sundry plumbing fittings and connections			
	Carried Forward			
	Section No. 2 Bill No. 13 PLUMBING AND DRAINAGE		R	

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward			R
	For product and/or material descriptions, the insertion: '...or similar approved' shall refer to comparable products and/or materials of similar quality, strength, physical appearance, performance and guarantee/warranty offered and will thus require the approval of the architect prior to procurement in cases where the contractor opts for a similar product/material to the one specified.		
7	Vitreous china 90° outlet, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted complete with exposed top inlet flush-valve complete with all necessary fittings to manufacturer's specification and applicable SABS standards	No	19
8	Vitreous china 90° outlet, back inlet pan to comply with SABS 497. Fitted complete with Back inlet exposed flushvalve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever.	No	2
9	Vitreous china size 415 x 315 x 275mm wall urinal supplied with 38mm CP domical grating, CP top inlet spreader and two hanger brackets with exposed flush valve according to manufacture's specifications and applicable SABS standards.	No	3
10	Vitreous china size 460 x 330mm rectangular basin with one tap hole including mounting kit, angle valve, flexi hose, etc in strict accordance to manufacturer's specification.	No	28
11	Vitreous china 510mm x 420mm semi rounded lavatory basin to comply with SABS 497, in single tap hole configuration fitted	No	2
<u>WASTE UNIONS ETC</u>			
12	'Cobra Aqua' or similar approved slotted basin waste with 62mm diameter flange and 80mm long shank	No	30
13	Chrome plated 38mm urinal waste fitting	No	3
<u>TRAPS ETC</u>			
14	'Cobra (code 385/35SQ)' or similar approved bottle trap	No	30
15	'Cobra (Code 360)' or similar approved urinal bottle trap	No	3
Carried Forward			R
Section No. 2 Bill No. 13 PLUMBING AND DRAINAGE			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

					R
	Brought Forward				
	<u>uPVC Pipes:</u>				
16	50mm Pipes fixed to walls, ceilings, roofs, floors, or laid in filling	m	99		
17	50mm Pipes chased to walls	m	8		
18	110mm Pipes fixed to walls, ceilings, roofs, floors or laid in filling	m	53		
	<u>Extra over uPVC pipes for fittings:</u>				
19	50mm Bends	No	66		
20	50mm access bends	No	33		
21	50mm tee	No	30		
22	110mm bend	No	42		
23	110 mm Access bend	No	21		
24	110mm Pan connector	No	21		
	<u>TAPS, VALVES, ETC</u>				
	<u>Taps and mixers</u>				
25	Chrome plated Elbow action pillar-tap, with ¼ turn ceramic disc head and blue & Red indicators water applications and flanged backnut	No	2		
26	'Cobra' or similar approved basin mixer	No	30		
27	Flexible connection pipe	No	24		
28	'Cobra flushmaster (Code FJS6.000)' or similar approved urinal flash valve	No	3		
29	15mm chromium plated angle regulating valve	No	81		
	<u>BUDGETARY ALLOWANCES</u>				
30	Allow a budgetary amount for plumbing reticulation and connection to existing water connections				
			Item		10 000,00
	Carried Forward				
	Section No. 2				
	Bill No. 13				
	PLUMBING AND DRAINAGE				

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward		R
31	Allow a budgetary amount for Counter for Wash Hand Basins	30 000,00
32	Allow a budgetary amount for 150 litre gyser	7 500,00
Carried Forward to Summary of Section No. 2		R
Section No. 2		
Bill No. 13		
PLUMBING AND DRAINAGE		

Item No		Quantity	Rate	Amount
<u>SECTION NO 2: BUILDING WORKS</u>				
<u>BILL NO 14</u>				
<u>GLAZING</u>				
Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
Tenderers are to provide an allowance for protection of glass as all scratched glass will have to be replaced				
<u>GLAZING TO STEEL WITH PUTTY</u>				
<u>8.76mm laminated low E safety glass</u>				
1	6mm panes over 0.5m2 but not exceeding 2.5 m2	m2	39	
<u>TOPS, SHELVES, DOORS, MIRRORS ETC</u>				
2	600 x 900mm plate glass mirror with bevelled edges, fixed with double sided tape	No	30	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 14				
GLAZING				

Item No		Quantity	Rate	Amount
	<u>SECTION NO 2: BUILDING WORKS</u>			
	<u>BILL NO 15</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section			
	<u>DESCRIPTIONS</u>			
	Descriptions of paintwork shall be deemed to include for all cutting in			
	<u>ON INTERNAL FLOATED PLASTER SURFACES</u>			
	<u>3 coats of PVA emulsion paint in matt finish to SABS 1586 on 6mm thick light hemi-hydrate gypsum plaster on concrete slab soffit.</u>			
1	On walls	m2	1 005	
	<u>ON EXTERNAL FLOATED PLASTER SURFACES</u>			
	<u>3 coats of Acrylic (PVA) emulsion paint in matt finish to SABS 1586 on 6mm thick light hemi-hydrate gypsum plaster on concrete slab soffit.</u>			
2	On walls	m2	957	
	<u>ON PLASTER BOARD</u>			
	<u>3 coats of PVA emulsion paint in matt finish to SABS 1586 on 6mm thick light hemi-hydrate gypsum plaster</u>			
3	On ceilings and cornices	m2	490	
	<u>ON FIBRE CEMENT</u>			
4	To fascias and barges	m	216	
	<u>ON METAL SURFACES</u>			
	Carried Forward		R	
	Section No. 2 Bill No. 15 PAINTWORK			

IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES

Brought Forward			R
<u>Prepare surface and apply primer according to SABS 723, one undercoat SABS681 and two coats washable enamel paint or similar approved. Colour to match existing onsite</u>			
5	Door frames	m2	103
6	To steel windows (both sides measured flat)	m2	156
7	To burglar bars (both sides measured flat)	m2	182
8	Steel gates (both sides measured flat)	m2	58
<u>DULUX WATERPROOFING MEMBRANE 80gsm WITH WATERPROOFING PAINT</u>			
Carried Forward			R

Section No. 2

Bill No. 15

PAINTWORK

Brought Forward			R
	<u>Ensure that surfaces are sound and free from dust, oil, grease, dirt, fungal growth and debris. Surfaces must be thoroughly dry - no more than 12% moisture content. Remove all loose rust and white scale by means of wire brushing, sanding, chipping, or mechanical scouring - down to bright metal. To remove dirt, salts and zinc corrosion (white rust) clean thoroughly with Dulux Galvanised Iron Cleaner achieving a water-break free surface. Areas showing red rust must be removed back to bright galvanised iron spot primed with Dulux Trade Corrocote 1 or Dulux Galvanised Iron Primer followed by one full coat of the same primer, overcoat with Dulux Waterproofing within 48 hours. An acrylic waterproofing paint developed to be used with a mesh membrane. Suitable on flashing, roof joins, roof screws, parapets and chimney capping. Apply two (2) coats of dulux waterproofing on Dulux waterproofing membrane. First Coat: Roll or Brush a thick coat of Dulux Waterproofing (1litre/ m²). Work the membrane into the wet coat by using a roller or a stiff brush, avoiding the formation of bubbles or creases in the material. Second Coat: Once the first coat has dried sufficiently to take working traffic (2 – 3 hours depending upon weather), apply a second coat of Dulux Waterproofing (0.7 litre/m²) to ensure the membrane is completely wet. Third Coat: Once the second coat is dry, apply a final coat of Dulux Waterproofing at the spreading rate of second coat (0.7 litre/m²). *Note On flat surface. Membrane overlaps should be a minimum of 100mm. Allow a minimum drying period of 30 minutes before applying. Thinner Drying Time Re coating Time Cleaning of equipment Substrates Precautions SURFACE PREPARATION Thinning not recommended.</u>		
9	On Roofs	m2	1 007
	<u>ON WOOD SURFACES</u> <u>Prepare surface and apply vanish to comply with SABS 723, SABS 681 and SABS 630, and finish with 2 coats alkyde egg-shell paint: colour blue</u>		
10	To timber doors	m2	94
Carried Forward			R
Section No. 2 Bill No. 15 PAINTWORK			

IKHALA - STERKSPRUIT BUSINESS CAMPUS UPGRADES OF EXISTING FACILITIES BILL OF QUANTITIES

Brought Forward			R
	<u>Prepare surface and apply vanish to comply with SABS 723, SABS 681 and SABS 630, and finish with 2 coats alkyde egg-shell paint: colour TBC</u>		
11	To timber doors	m2	14
Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 15 PAINTWORK			R

IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES

Item No	Quantity	Rate	Amount
<u>PROVISIONAL SUMS</u>			
<u>BILL NO 16</u>			
<u>PROVISIONAL SUMS</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
The Contractor's attention is drawn to the fact that the indicated individual sums may consist of a number of Specialist Contracts, all of which will be executed by separate contractors. The Contractor must therefore allow in his tender for any cost implication this may bring about, as no claims in this regard will be entertained			
<u>CLASSROOMS</u>			
<u>IRONMONGERY</u>			
1	Allow a budgetary amount of R40 000,00 (Forty Thousand Rands) for the supply, delivery and installation of all Ironmongery	Item	40 000,00
<u>ELECTRICAL INSTALLATION</u>			
2	Allow a provisional sum of R1 650 000,00 One Million Six Hundred and Fifty Thousand for electrical installation such as smart boards, plugs, lights, light switches and cable connection to existing DB	Item	1 650 000,00
3	Allow for profit if required	%	
4	Allow for general attendance	%	
<u>LEARNER TRAINING</u>			
5	Allow a provisional sum of R200 000,00 Two Hundred Thousand for Learner Training	Item	200 000,00
6	Allow for profit if required	%	
7	Allow for general attendance	%	
<u>PROFESSIONAL SERVICES SUPERVISION</u>			
8	Allow a provisional sum of R200 000,00 Two Hundred Thousand for Professional Services Supervision	Item	200 000,00
Carried Forward			R
Section No. 2 Bill No. 16 PROVISIONAL SUMS			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

	Brought Forward		R
9	Allow for profit if required		%
10	Allow for general attendance		%
	<u>LEARNER MENTORING</u>		
11	Allow a provisional sum of R50 000,00 Fifty Thousand for Learner Mentoring	Item	50 000,00
12	Allow for profit if required		%
13	Allow for general attendance		%
	<u>CLO AND STAKEHOLDER ENGAGEMENT</u>		
14	Allow a provisional sum of R50 000,00 Fifty Thousand for CLO and Stakeholder Engagement	Item	50 000,00
15	Allow for profit if required		%
16	Allow for general attendance		%
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 16			
PROVISIONAL SUMS			

IKHALA - STERKSPRUIT BUSINESS CAMPUS UPGRADES OF EXISTING FACILITIES BILL OF QUANTITIES

Bill No	SECTION SUMMARY - BUILDING WORKS	Page No	Amount
1	ALTERATIONS	34	
2	EARTHWORKS	37	
3	CONCRETE, FORMWORK AND REINFORCEMENT	40	
4	MASONRY	42	
5	WATERPROOFING	44	
6	ROOF COVERING	46	
7	CARPENTRY AND JOINERY	50	
8	CEILINGS, PARTITIONS, ETC.	52	
9	FLOOR COVERINGS	54	
10	METALWORK	56	
11	PLASTERING	57	
12	TILING, ETC	59	
13	PLUMBING AND DRAINAGE	63	
14	GLAZING	64	
15	PAINTWORK	68	
16	PROVISIONAL SUMS	70	
Carried to Final Summary			R
Section No. 2			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Item No		Quantity	Rate	Amount
	<u>SECTION NO 3: SPECIAL INSTALLATIONS</u>			
	<u>BILL NO 1</u>			
	<u>WET SERVICES</u>			
	<u>The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.</u>			
	<u>PLUMBING - WATER SUPPLIES TO ABLUTIONS</u>			
	<u>Copper pipes</u>			
1	28mm Copper Tube Incl elbows, Tees, reducers etc	m	120	
2	22mm Copper Tube Incl elbows, Tees, reducers etc	m	190	
3	15mm Copper Tube Incl elbows, Tees, reducers etc	m	150	
4	15mm GATE VALVE	No	80	
5	22mm GATE VALVE	No	60	
6	28mm GATE VALVE	No	24	
	<u>Installation and Commissioning</u>			
7	Test and commission the complete water supply installation system including pressure testing of the all primary flow and return pipes, cold water pipes and hot water delivery pipes and performance test of the installation	Item		
	Carried Forward to Summary of Section No. 3			
	Section No. 3			
	Bill No. 1			
	WET SERVICES			

R

Item No	Quantity	Rate	Amount
<u>SECTION NO 3: SPECIAL INSTALLATIONS</u>			
<u>BILL NO 2</u>			
<u>SEWERAGE & DRAINAGE WORK</u>			
<u>PLUMBING WORKS</u>			
<u>General Notes:</u>			
All unplasticized polyvinyl chloride (uPVC) pipes used in the plumbing installation must conform in every respect to the requirements of the SANS 10400 comply with Building Regulations Act No 103 of 1977.			
All fittings and specials used in the plumbing installation shall be suitable in all respects to the pipe line to which fittings and specials are fixed.			
Samples of fittings and fixtures shall be provided for approval by the Engineer prior to purchase of materials.			
Rates for plumbing work shall include for:-			
(a) Complying with the relevant South Africa, British or any other standard as given under the specifications and with the regulations of the Municipal Council and or any other relevant authorities.			
(b) All specials such as elbows, bends, tees, junctions, plugs, reducers and similar pipe fittings except for valves which will be measured separately.			
(c) Connecting pipes to sanitary fixtures and appliances.			
(d) Chasing to brick, cement block or concrete walls, columns, beams etc. and necessary hangers and clips, for fixing to soffits etc. and making good all works disturbed.			
(e) Connecting different types of pipes.			
(f) Testing and disinfection after completion.			
(g) Excavation, backfilling, disposal for surplus soil.			
Carried Forward		R	
Section No. 3 Bill No. 2 SEWER AND DRAINAGE WORKS			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Brought Forward			R
<u>Sewerage and Waste Water Disposal</u>			
Note :			
1.Supplying, laying and jointing of uPVC pipes of running under the floor tiles, fixed to wall at adequate intervals and laid under ground connecting manholes for the efficient discharge of sewage and waste water. Rate to include for all necessary pipe specials, brackets, clips, supports, anchors, jointing materials etc.			
2.Outer appearance of the sanitary appliances shall be finalized by Architecture			
<u>Internal Pipes</u>			
<u>Supply and laying of 110 mm diameter Class 1 PVC pipe including all necessary fittings such as bends, tees, reducers, Y- sections, valve sockets tees cleaning eye, etc complying with SANS 10400 : and supports and fixing materials such as pipe clips, hangers etc.</u>			
1	PVC SV Bend 95 (IE Bend) SB41 110mm	No	14
2	PVC Pipe 50mm WPE 311-E	m	6
3	PVC Pipe 110mm type Class 1	m	30
4	PVC Soil & Vent 90° Plain Junction 110mm	No	4
5	PVC SV 135 Plain Junction 110 SY49	No	14
<u>Manholes</u>			
<u>Supply all material and construct R.C. manhole: Rate shall include for excavation, backfilling, base slab, reinforcement, benching, wall, internal plastering, iron rungs, ductile iron access cover with frame) , lifting handles</u>			
6	Excavation and backfilling	m3	2
7	Backfilling	m3	2
8	1000X250 Conrete Starter Ring without steps	No	4
9	1000X750 Concrete Reducer slab	No	1
10	1000X560 Concrete cover slab	No	1
Carried Forward			R
Section No. 3 Bill No. 2 SEWER AND DRAINAGE WORKS			

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

	Brought Forward			R
11	1280x1280x200 reinforced concrete base with benching (25Mpa)	m3	1	
12	External Underground Pipes Supply and installation of 160mm dia UD Class 51 PVC pipe between inspection chambers, manholes complete with all necessary fittings such as bends, reducers etc., complying with SANS 10400 and supports and fixing materials. . The rate shall include for excavation of pipe trenches laying pipe inside the trench, sand bedding, backfilling & all other works necessary for the completion of underground pipe laying	m	30	
	<u>Installation and Commissioning</u>			
13	Connecting different types of pipes to existing connections		Item	
14	Testing and disinfection after completion and before commissioning		Item	
Carried Forward to Summary of Section No. 3				R
Section No. 3				
Bill No. 2				
SEWER AND DRAINAGE WORKS				

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Bill No	SECTION SUMMARY - SPECIAL INSTALLATIONS	Page No	Amount
1	WET SERVICES	72	
2	SEWER AND DRAINAGE WORKS	75	
Section No. 3		Carried to Final Summary	
		R	

**IKHALA - STERKSPRUIT BUSINESS CAMPUS
UPGRADES OF EXISTING FACILITIES
BILL OF QUANTITIES**

Section No	<u>FINAL SUMMARY</u>	Page No	Amount	
1	PRELIMINARIES	32	R	
2	BUILDING WORKS	71		
3	SPECIAL INSTALLATIONS	76		
	Sub Total A			
	<u>CONTINGENCIES</u>			
	Allow a Sum of 5% of the Contract Sum for Contingencies to be used as directed by the Principal Agent, or deducted in whole or in part, if not required		R	
	Sub Total B		R	
	VALUE ADDED TAX @ 15%		R	
	Carried to Form of Tender			
			R	